

**AMENDMENTS TO THE DRAWINGS:**

Applicants submit the attached three replacement drawing sheets to amend Figs. 1, 2B, and 4 as discussed below.

Fig. 1: Block 11 in the replacement drawing sheet is labeled as “controller” and block 12 in the replacement drawing sheet is labeled as “inverter”.

Fig. 2B: The legend “FIG. 2B” is added in the replacement drawing sheet containing Figs. 2A and 2B.

Fig. 4: Block 50 in the replacement drawing sheet is labeled as “signal source”.

Attachment: Three (3) replacement drawing sheets containing Fig. 1, Figs. 2A and 2B, and Fig. 4.

**REMARKS**

In the Office Action,<sup>1</sup> the Examiner :

- (a) rejected claims 1-3, 5, 7-9, 12, 14, 15, 17, and 19 under 35 U.S.C. § 102(b) as being anticipated by Lin et al. (U.S. Patent No. 6,501,234) ("Lin");
- (b) rejected claims 4, 6, 11, 13, 16, and 18 under 35 U.S.C. § 103(a) as being unpatentable over Lin.

Applicants have amended claims 1, 4, 8, 11, and 16, and added new claims 20 and 21. Applicants have also cancelled claims 3, 5, 6, 10, 12, 13, 15, 17, and 18 without prejudice or disclaimer of their subject matter. Claims 1-2, 4, 7-9, 11, 14, 16, and 19-21 remain pending and under current examination.

Applicants have amended Figs. 1, 2B, and 4 to accurately label those figures. No new matter has been added, since the description in the original specification provides support for Fig. 1 (page 1, lines 13-15), Fig. 2B (page 3, line 11), and Fig. 4 (page 5, line 18).

Applicants have also amended the specification to insert lines of text that were inadvertently omitted from the copy of the patent application filed February 26, 2004. These inadvertent omissions were introduced due to inadvertent mishandling of application materials by clerical staff.

Pursuant to 37 C.F.R. § 1.57(a)(1), Applicants rely on their incorporation by reference of their R.O.C. priority application no. 092104214 for support of the amendments to add the inadvertently omitted text in the specification. Applicants' claim

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<sup>1</sup> The Office Action may contain statements characterizing the related art, case law, and claims. Regardless of whether any such statements are specifically identified herein, Applicants decline to automatically subscribe to any statements in the Office Action.

for priority was contained in the transmittal letter forwarding the application to the U.S. Patent and Trademark Office for filing on February 26, 2004. As required by Section 1.57(a)(1)(ii), an English language translation of the portions of the R.O.C. priority application corresponding to the added text are also submitted herewith.

**Rejection of Claims 1-3, 5, 7-9, 12, 14, 15, 17, and 19 under 35 U.S.C. § 102(b):**

Applicants traverse this rejection and assert that it is moot with respect to claims 3, 5, 12, 15, and 17, due to the cancellation of those claims. Applicants respectfully disagree with the Examiner's arguments and conclusions.

In order to properly establish anticipation under 35 U.S.C. § 102, the Federal Circuit has held that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). See also M.P.E.P. § 2131.

Lin does not disclose each and every element recited in the claims, despite the Examiner's allegations. Particularly, Lin does not disclose, at least, Applicants' claimed method "wherein the switch frequency value of the burst mode equals a scan frequency value multiplied by a multiple (N+0.5), where N is a positive number," as recited in claim 1.

The Examiner alleged that Lin teaches "deriving a switch frequency value of the burst mode according to the scan frequency value [a frequency selection signal 40 is

*greater than a frequency of PWM signal 36 in col. 5, line 47]* (Office Action, p. 2).

However, whether this allegation is correct or not, Lin does not teach “[a] method for adjusting a switch frequency . . . comprising the steps of: . . . deriving a switch frequency value of the burst mode according to the scan frequency value, wherein the switch frequency value of the burst mode equals a scan frequency value multiplied by a multiple (N+0.5), wherein N is a positive number” (emphasis added), as recited in claim 1.

The Examiner also alleged that “[a]s to claim 3, Lin teaches the method according to claim 2, wherein the switch frequency value of the burst mode equals a scan frequency value multiplied by a multiple (N+0.5), wherein N is a positive number *[it is noted that when period  $T/k$  ( $k$  is the multiplier of signal 38) of the multiple signal 40, see col. 5, lines 44-58]*” (Office Action, p. 3). However, this is not correct. Lin discloses “a multiplier to multiply the frequency of the reference signal 38 (of period, T) by a factor of k, and generate a multiple signal 40 (of period,  $T/k$ )” (col. 5, lines 11-14). Lin also discloses “frequency selector 14 doubles the frequency (i.e.,  $k=2$ ) of independent reference signal Vsync 38, thereby generating a frequency selection signal 40 having period of  $T/2$ ” (col. 5, lines 53-56, and col. 7, lines 58-64). However, Lin fails to teach or suggest “the switch frequency value of the burst mode equals a scan frequency value multiplied by a multiple (N+0.5), wherein N is a positive number,” as recited in claim 1.

Applicants’ independent claim 8 is directed to “[a] switch frequency adjusting system for a burst mode of a liquid crystal display, comprising . . . an adjuster electrically connected to the receiver, for deriving a switch frequency value of the burst mode according to the scan frequency value, wherein the switch frequency value of the

burst mode equals a scan frequency value multiplied by a multiple (N+0.5), wherein N is a positive number . . . ”. Similar to the discussion above in connection with claims 1 and 3, Lin does not teach “deriving a switch frequency value of the burst mode according to the scan frequency value, wherein the switch frequency value of the burst mode equals a scan frequency value multiplied by a multiple (N+0.5), wherein N is a positive number. . .” (emphasis added), as recited in claim 8. Lin therefore fails to teach each and every element recited in claim 8.

For at least this reason, Lin does not anticipate independent claims 1 and 8. Independent claims 1 and 8 are allowable, and dependent claims 2, 7, 9, 14, and 19 are also allowable at least by virtue of their dependence from one of allowable base claims 1 and 8. The 35 U.S.C. § 102(b) rejection is therefore improper and should be withdrawn.

**Rejection of Claims 4, 6, 11, 13, 16, and 18 under 35 U.S.C. § 103(a):**

Applicants traverse this rejection and assert that it is moot with respect to claims 6, 13, and 18, due to the cancellation of those claims. No *prima facie* case of obviousness has been established with respect to remaining claims 4, 11, and 16. As M.P.E.P. § 2142 states, “[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.”

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success

must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). M.P.E.P. § 2142, 8th Ed., Rev. 5 (August 2006), p. 2100-125, 126.

Each of these requirements must "be found in the prior art, and not be based on applicant's disclosure." M.P.E.P. § 2143.

As set forth above, Lin fails to teach or suggest at least "the switch frequency value equals the scan frequency value multiplied by a multiple ( $N+0.5$ ), wherein  $N$  is a positive number," as recited in independent claims 1 and 8. For at least this reason, no *prima facie* case of obviousness has been established. Applicants request withdrawal of the § 103(a) rejection and the timely allowance of claims 4, 11, and 16, at least because each of these claims depends from one of allowable base claims 1 and 8.

**New claims 20 and 21:**

New independent claim 20 recites, *inter alia*, "the switch frequency value [of the burst mode] equals the scan frequency value multiplied by a multiple ( $N+0.5$ ), wherein  $N$  is a positive number". Lin does not teach or suggest at least this feature. For at least this reason, new claim 20 should be allowed. New claim 21 should be allowed at least because of its dependence upon independent claim 20. Applicants therefore request timely allowance of new claims 20 and 21.

**Conclusion:**

In view of the foregoing, Applicants request reconsideration of the application and withdrawal of the rejection. Pending claims 1-2, 4, 7-9, 11, 14, 16, and 19-21 are in condition for allowance, and Applicants request a favorable action.

If there are any remaining issues or misunderstandings, Applicants request the Examiner telephone the undersigned representative to discuss them.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: February 28, 2007

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Attachments:

Attachment A consisting of pages A-1 and A-2 containing an English translation of paragraphs of R.O.C. priority application no. 092104214.

Three (3) replacement drawing sheets containing Fig. 1, Figs. 2A and 2B, and Fig. 4.



Application Number: 10/639,144  
Attorney Docket Number: 06720.0104-00000

**Attachment A**

**English translation of paragraphs of R.O.C. priority application no. 092104214 beginning on: page 6, line 20; page 7, line 17; page 8, line 10; page 9, line 9; and page 11, line 3, as follows:**

English translation of the paragraph beginning on page 6, line 20:

The waveform of a control signal of the burst mode is shown Fig. 2B and the frequency of the control signal is also 30-70 KHz. A switch frequency of the control signal is about 100-500 Hz, and the switch frequency is controlled to tune the brightness of the lamp by adjusting the duty cycle of the ON/OFF time of the control signal.

English translation of the paragraph beginning on page 7, line 17:

According to the method of the invention, the switch frequency value can be adjusted through calculation or by a look-up table. The switch frequency value preferably equals the scan frequency value multiplied by a multiple ( $N+0.5$ ), wherein  $N$  is a positive number. A tolerable range of the switch frequency value of the burst mode is  $\pm 20$  Hz. The method of the invention utilizes various scan frequency values to adjust the switch frequency value. Therefore, no matter what scan frequency value is provided by the signal source, the switch frequency value can be dynamically adjusted according to the scan frequency value so as to eliminate or

decrease the water flow on the display. Thus, the eyes of people will not sense the water flow on the display.

English translation of the paragraph beginning on page 8, line 10:

At step 32, a switch frequency value of the burst mode is obtained by dynamically adjusting the scan frequency value. The method of the invention can utilize a calculation way to obtain the switch frequency value of the burst mode according to the scan frequency value. The switch frequency value equals the scan frequency value multiplied by a multiple  $(N+0.5)$ , wherein  $N$  is a positive number. Besides, a tolerable range of the switch frequency value of the burst mode is  $\pm 20$  Hz.

English translation of the paragraph beginning on page 9, line 9:

At step 33, the switch frequency value is transmitted to a lamp controller. The lamp controller transmits a control signal waveform to a lamp to light the lamp and to control the brightness of the lamp according to the switch frequency value.

English translation of the paragraph beginning on page 11, line 3:

While an embodiment of the present invention has been illustrated and described, the embodiment of the present invention is not restrictive. Various modifications and improvements can be made by those skilled in the art. It is intended that the present invention may not be limited to the particular forms as illustrated. The spirit and scope of the present invention are defined in the appended claims.